

RUBINSHTEYN, V.

MT ^V Refractory concrete casing for tube furnaces. V. Rubinshtein. *Novosti Neftyanoi Tekh.* 1953, No. 7, 8-12; *Khimiya. Zhur., Khim.* 1955, No. 903. — Best results were obtained with a compn. contg. Na silicate with an addn. of Na_2SiF_6 , 1. powd. grog 1, and filler of ground grog and crushed stone 3 parts by wt. The ratio between the sand and the crushed stone should be 1.5:1.5-1.3:1.7. For a refractory concrete with aluminous cement base is recommended 1 part by wt. cement and 4.5 parts crushed grog. The ratio between the sand and crushed stone in the filler is 2.25:2.27-2:2.50. M. Hosh

RUBINSHTEYN, V.A., inzh.

Characteristics of building irrigation canals on slopes composed of
loess soils. Gidr. i mel. 14 no.9:51-55 S '62. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i in-
zhenernoy geologii.

RUBINSHTEYN, A.L., doktor tekhn. nauk. prof.; RUBINSHTEYN, V.A., inzh.

New apparatus for testing weak soils for compression. Izv.
TSKHA no.5:239-240 '62. (MIRA 16:7)

(Soil mechanics)

ACC NR: AT6030941

(A)

SOURCE CODE: UR/0000/66/000/000/0122/0132

AUTHORS: Ignat'yeva, V. S. (Candidate of technical sciences); Rubinshteyn, V. D.;
Senatorov, A. P.

ORG: none

TITLE: Stresses arising during the welding of tempered steels as a consequence of
drawing the zone near the seam

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. Prochnost' svarnykh
konstruktsiy (Strength of welded structures). Moscow, Izd-vo Mashinostroyeniye, 1966,
122-132

TOPIC TAGS: welding, welding technology, butt welding, stress analysis

ABSTRACT: An effort is made to explain the variation of internal stresses and strains
in the welded zone of tempered steels with the dimensions of the welded object and the
type of weld. The study is limited to the special case of one-pass butt welds. As a
first approximation, the completion of the weld is assumed to be instantaneous and
structural variations in the drawing zone occur instantaneously. Under these
assumptions stress components may be identified by application of the methods given by
N. N. Prokhorov and V. S. Ignat'yeva (Resheniye zadachi o fazovykh napryazheniyakh pri
svarke zakalivayushchikhsya staley kak chastnyy sluchay resheniya temperaturnoy
zadachi teorii uprugosti. Sbornik trudov MVTU im. Baumana. Svarka tsvetnykh splavov

Card 1/2

ACC NR: AT6030941

i nekotorykh legirovannykh staley. Oborongiz, 1962). The working equations for this special case are developed. Free deformations during drawing were measured for each of 3 specimens in 3 series of tests, and the amplitudes of critical stresses are plotted as a function of the distance from the weld seam. The tests indicate that in one-pass butt welding of annealed plates the metal of the seam and of the zone near the seam expands. The total residual stresses may be one of the factors in crack formation of a particular type and also one of the reasons for the development of microcracks during welding. Certain components were noted to be dependent upon the length of the seam and the plate thickness. Orig. art. has: 2 tables, 8 figures, and 9 equations.

SUB CODE: 11, 13/ SUBM DATE: 11Mar66/ ORIG REF: .003

Card 2/2

RUBINSHTEIN, Viktoriya Feliksovna; STERLE, L.A., red.

[Methodological manual on structural drawing] Metodicheskoe posobie po stroitel'nomu chercheniiu. Leningrad, 1962.
30 p. (MIRA 16:7)
1. Leningrad. Lesotekhnicheskaya akademiya.
(Structural drawing)

YASHCHENKO, F.Ye.; DINYASHKIN, N.G.; RUBINSHTEYN, V.M.; SHAPIROVICH, S.A.

Synthetic diamonds at the "Dormashina" Plant in Nikolaev.
Mashinostroitel' no.10:39-42 0 '64.

(MIRA 17:11)

L 35832-66 EWP(j)/EWT(m)/T IJP(c) RM

ACC NR: AP6015730

SOURCE CODE: UR/0032/66/032/005/0609/0611

AUTHOR: Rubshteyn, V. M.; Belynskiy, V. A.; Sogolova, T. I.; Kargin, V. A.

ORG: Scientific Research Physico-Chemical Institute im. L. Ya. Karpov (Nauchno-issledovatel'skiy fiziko-khimicheskiy institut) 45

TITLE: Instruments for testing small amounts of polymer materials 44

SOURCE: Zavodskaya laboratoriya, v. 32, no. 5, 1966, 609-611 B

TOPIC TAGS: polymer structure, polymer chemistry, physical chemistry instrument, thermoplastic material, tensile strength, elongation, film processing

ABSTRACT: The article describes three newly developed instruments which are recommended for use in laboratories involved in the study of the properties and the structure of polymers over a wide temperature interval. The first is a dynamometer of the pendulum type (illustrated in the article) designed for determination of the tensile strength and the elongation limits of polymer materials over a wide temperature interval and at different rates of elongation. The initial size of the samples used is: length 10-20 mm, width 1-5 mm, thickness 0.05-0.5 mm; the volume of the minimum amount of material is 0.5 mm³, and the maximum is 50 mm³. The article gives detailed specifications of the instrument. The second development is an instrument for the elongation of wide films.

Card 1/2

UDC: 620.17:1.05

L 35832-66

ACC NR: AP6015730

With this instrument, tests can be made of the deformation of wide films of polymer material at temperatures from 20 to 250°C in an argon atmosphere. The third and final development described is a laboratory extruder designed to produce films and fibers from small quantities of thermoplastic materials. The article gives a diagram and detailed dimensions and specifications. Orig. art. has: 3 figures.

SUB CODE: 11/ SUBM DATE: none

rs
Card 2/2

RUBINSHTEYN, V.S., dotsent, kand.tekhn.nauk

Testing arches with prestressed tie beams. Prom. stroi. 41 no.2:
32-35 F '64. (MIRA 17:3)

RUBINSHTEYN, VLADIMIR SOLOMONOVICH

N/5
748.2
.R8

Proizvodstvo zhelezobetonnykh izdeliy na zavodakh i poligonakh
stroitel'stv predpriyatiy neftyanoy promyshlennosti (Reinforced
concrete production in construction enterprises in the oil industry)
Moskva, Gostoptkhizdat, 1957.

191 p. illus., diags., tables.

"Literatura": p. 190

RUBINSTEYN, Vladimir Solomonovich; kand.tekhn.nauk; NOVIKOVA, M.M., inzhener,
vedushchiy red.; KHLIBNIKOVA, L.A., tekhn.red.

[Manufacturing reinforced concrete elements in plants and construction
yards of the petroleum industry] Proizvodstvo zhelezobetonnykh
izdelii na zavodakh i poligonakh stroitel'stv predpriatii neftianoi
promyshlennosti. Moskva, Gos.nauchno-tekhn.izd-vo nefi.i gorno-
toplivnoi lit-ry, 1957. 191 p. (MIRA 10:12)

(Precast concrete)

KUBIKASHTEYN, V. V.

83410

5.3830A

S/191/60/000/006/002/015
B004/B054

AUTHORS: Akutin, M. S., Parlashkevich, N. Ya., Kogan, I. N.,
Rubinshteyn, V. V., Gribkova, R. N.

TITLE: Production of Block Polymers and Grafted Polymers by
Means of Spark Discharge in a Liquid

PERIODICAL: Plasticheskiye massy, 1960, No. 6, pp. 2 - 5

TEXT: The authors report on experiments made with an apparatus schematically shown in Fig. 1. Spark discharges were generated in a vessel (Fig. 2) filled with the substances to be polymerized; a shaping spark gap was connected in series with the spark gap in the vessel. The condenser potential attained 60 kv, the energy stored was about 100 joules, the discharge frequency was about 0.5 - 1.5 cps. The authors discuss the effects of the spark (hydraulic and cavitation surge, formation and re-composition of free radicals), as well as the influence of aperiodic discharges on the transformation of electric energy into mechanical energy. A solution of 15 parts by weight of polyvinyl chloride, 50 parts by weight of methyl methacrylate, and 100 parts by weight of cyclohexane

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83410

Production of Block Polymers and Grafted
Polymers by Means of Spark Discharge in a
Liquid

S/191/60/000/006/002/015
B004/B054

proved to be convenient for the production of grafted polymers. After 5 hours of spark discharges at 20°C, the authors performed a heating to 100°C, a precipitation of the cyclohexane and the methyl methacrylate not having reacted by means of ethanol, and an extraction of the poly-methyl methacrylate and the polymer with a low content of polyvinyl chloride (PVC) by means of glacial acetic acid. The insoluble fraction contained PVC and grafted polymer with a high content of vinyl chloride. A comparison with a solution not treated with sparks (Table) showed that in this case the insoluble fraction contained only 37 molecules of methyl methacrylate per 100 molecules of vinyl chloride whereas in the insoluble fraction of a spark-treated solution 100 molecules of vinyl chloride contained 63 molecules of methyl methacrylate. Thus, the yield in grafted polymer was doubled. Block polymers were produced from 5% solutions of PVC and ethyl cellulose (1 : 1) in equal parts of ethyl acetate + cyclohexane under the same conditions as the grafted polymers. The chlorine content of the insoluble fraction was 45%. There are 2 figures, 1 table, and 13 references: 9 Soviet, 1 British, 1 Belgian, and 2 German.

Card 2/2

KOGAN, I.N.; RUBINSHTEYN, V.V.; VURZEL', F.B., MAY, A.V.

Continuous viscosimeter. Report No.1: Probe theory. Plast.massy
no.11:42-46 '60. (MIRA 13:12)

(Viscosimeter)

S/191/61/000/003/010/015
B124/B203

AUTHORS: Kogan, I. N., Vurzel', F. B., Rubinshteyn, V. V., May, A.V.
TITLE: Continuous-action viscosimeter. Design and principle of the instrument
PERIODICAL: Plasticheskiye massy, no. 3, 1961, 49-53

TEXT: It had been shown earlier (Ref. 1: I. N. Kogan, V.V.Rubinshteyn, F. B. Vurzel', A. V. May, Plast.massy, no.11, 42 (1960)) that longitudinal natural oscillations of a magnetostrictive plate of the probe (immersed in a liquid of the viscosity η and the density ρ) excited by an impulse are attenuated with time, exponentially with the damping coefficient α ($\alpha \approx C\sqrt{\rho\eta}$ (1)) (where C is a constant dependent on the properties of the plate material and its geometrical dimensions). The real damping coefficient of the plate α_z is, however, a little higher, since Eq. (1) does not consider the no-load losses in the mechanical system of the probe. In the device described, the oscillations of the magnetostrictive plate are generated by current impulses which periodically pass the probe winding, the oscillations between two successive impulses being almost completely

Card 1/5

Continuous-action viscosimeter. ...

S/191/61/000/003/010/015
B124/B203

attenuated. The mechanical oscillations of the plate induce, in the probe winding, an alternating voltage of the same frequency and shape, which controls the frequency of the exciting impulses. The instrument works as follows: A saw-tooth generator (Fig.1) gives periodical exciting current impulses, 15 - 20 μ sec long, to the probe. The alternating voltage induced in the probe winding by mechanical oscillations is amplified, and conducted to the detector and the first integrator, where the signal is rectified, and its d.c. component is isolated. The voltage is re-amplified in the second integrator, balanced, and conducted into the primary circuit of the control tube of the saw-tooth generator; this ensures an automatic control of the frequency of exciting impulses. The instrument operates in such a way that the product of the damping coefficient α_z and of the frequency of impulses remains practically constant, i.e., $\alpha_z T = \text{const}$ (2), so that any value α_z corresponds to a certain frequency $F = 1/T \sim \alpha_z$ which is measured. Fig. 3 shows a variant of the design of the probe. This instrument also permits continuous remote measurements at temperatures up to 200°C in the ranges of 0-50, 0-500, 0-5000, and 0-50,000 centipoise·g/cm³,

Card 2/5

Continuous-action viscosimeter. ...

S/191/61/000/003/010/015
B124/B203

with an accuracy of 5% of the full scale of the range concerned. A minimum of a few cm³ is required for measuring substances at rest and during flow. F. A. Yakushev, V. M. Glazunov, and A. M. Raskina assisted in the investigations. There are 4 figures and 8 references: 7 Soviet-bloc and 1 non-Soviet-bloc.

Legend to Fig. 1: Functional scheme of the instrument. (1) Differentiation cell, (2) amplifier, (3) detector and integrator I, (4) integrator II, (5) control tube, (6) saw-tooth generator, (7) probe, (8) voltage stabilizer I, (9) voltage stabilizer II, (10) frequency meter.

Card 3/5

RUBINSHTEYN, V. V.

S/081/61/000/022/064/076
B101/B147

AUTHORS: Parlashkevich, N. Ya., Luzhkov, Yu. M., May, A. V.,
Volchek, I. S., Kogan, I. N., Rubinshteyn, V. V.,
Vurzel', F. B.

TITLE: Some problems of automatic control and regulation in
phenol-formaldehyde resin production

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 444, abstract
22P9 (Mekhaniz. i avtomatiz. proiz-va, no. 3, 1961, 17 - 20)

TEXT: Concentration of catalyst in phenol-formaldehyde resin (PFR) and
viscosity are the most important characteristics determining the con-
densation process and the quality of the finished product. The authors
describe schemes for controlling the catalyst concentration in continuous
production processes of PFR, basing on a change in the electrical con-
ductivity of the mixture, which evidently depends on the concentration of
the hydrochloric or oxalic acid in the mixture. For the automatic control
of PFR viscosity, they suggest the use of an ultrasonic viscosimeter. A
diagram for the continuous control of viscosity is given. [Abstracter's
note: Complete translation.]
Card 1/1

L 36102-66 EWT(m)/EWP(j)/EWP(k)/T/EWP(t)/ETI TJP(c) ID/WH/HW/GD/RM
ACC NR: AT6013171 (A) SOURCE CODE: UR/0000/60/000/000/0125/0131

AUTHORS: Akutin, M. S.; Parlashkevich, M. Ya.; Kogan, I. N.; Rubinshteyn, V. V. 73
77
B41

OZ: none

TITLE: Feasibility of preparation of block and graft polymers by means of spark discharge

SOURCE: Moscow. Oblastnoy pedagogicheskiy institut. Primeneniye ul'traakustiki k issledovaniyu veshchestva, no. 12, 1960, 125-131

TOPIC TAGS: *discharge chemistry, capacitor*
graft copolymer, block copolymer, electric discharge, methacrylate plastic, fluorocarbon plastic, vinyl chloride / IM60-0.03 capacitor

ABSTRACT: High voltage spark discharge in solution, discussed previously by M. S. Akutin, N. Ya. Parlashkevich, L. I. Menes, I. N. Kogan, V. V. Rubinshteyn, and V. N. Kotrelev (Avtorsk. svid. No. 127392, 39S, prioritet 5 iyunya 1959 g.), is described as applied to the synthesis of block and graft polymers. The polymers prepared in this manner were those of fluoroethylenes and methylmethacrylate, also vinyl chloride and methylmethacrylate, with the emphasis on the latter type. The diagram of the equipment employed in this work is shown in Fig. 1, with the details of the discharge chamber illustrated in Fig. 2. R. N. Gribkova participated in the experimental stage of this work.

Cord 1/2

L 36102-66

ACC NR: AF6013171

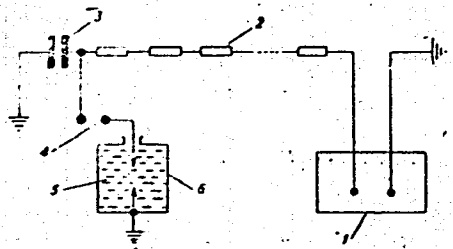


Fig. 1. Diagram of experimental set-up;
1 - high voltage rectifying apparatus. Rectified voltage is regulated in the range 50--100 kv;
2 - assembly of charge resistors; 3 - high voltage pulse capacitors, 0.056 microfarad (two parallel condensers of the IM60-0.03 type); 4 - "initiating" spark gap. Discharging rods are composed of two metallic spheres 35 mm in diameter; 5 - main (operating) discharge gap. Steel rod serves as positive electrode, bottom of the metal chamber serves as negative one; 6 - bath with the treated solution (see Fig. 2).

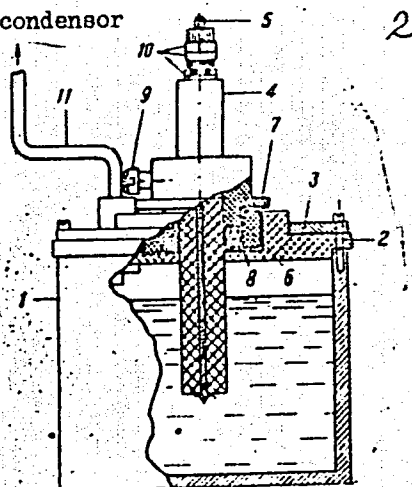


Fig. 2. Structure of the discharge chamber: 1 - cell; 2 - lid (teflon); 3 - collar; 4 - teflon cylinder; 5 - electrode; 6 - gasket seat (textolite); 7 - threaded pressure bushing (textolite); 8 - gasket (vacuum resin); 9 - bolt (vinyl plastic); 10 - nuts; 11 - glass tube.

Orig. art. has: 2 figures and 2 tables.

Card 2/2 LS SUB CODE: 07/ SUBM DATE: 31Oct60/ ORIG REF: 008/ OTH REF: 003

KOGAN, I.N., inzh.; KRICHMAR, G.Ya., inzh.; LUZHKOV, Yu.M., inzh.;
RUBINSHTEYN, V.V., inzh.

Multipoint ultrasonic viscosimeter. Mekh. i avtom.proizv. 19
no.2:33-35 F '65. (MIRA 18:3)

PARLASHKEVICH, N.Ya., kand.tekhn.nauk; KOGAN, I.N.; RUBINSHTEYN, V.V.;
MAY, A.V.; VOLCHEK, I.S.

Automation of the production of phenol-formaldehyde resins. Zhur.
VHKO 6 no.5:539-544 '61. (MIRA 14:10)
(Phenol condensation products) (Automation)

KOGAN, I.N.; PARLASHKEVICH, N.Ya.; VURZEL', F.B.; RUBINSHTEYN, V.V.;
KORNEYEV, I.Ya.; POTAPOV, B.A.; PLATONOVA, G.S.

Continuous control of viscosity in the production of liquid
bakelites. Plast.massy no.6:45-50 '62. (MIRA 15:6)
(Phenol condensation products) (Viscosity)

S/081/62/000/012/062/063
B158/B101

AUTHORS: Akutin, M. S., Parlashkevich, N. Ya., Kogan, I. N.,
Rubinshteyn, V. V.

TITLE: The possibility of producing block and graft polymers using
a spark discharge

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 663, abstract
12R55 (Sb. "Primeneniye ul'traakust. k issled. veshchestva".
M., no. 12, 1960, 125-131)

TEXT: A solution of two or several polymers in a non-polymerizable solvent
is subjected to the effect of a high voltage spark discharge (see
RZhKhim., no. 23, 1960, 94641) with a given repetition frequency
(0.5-1.5 cps). Under the effect of the pressure pulses occurring with the
discharge, the polymer molecules are ruptured with the formation of
macroradicals; on their subsequent recombination, block copolymers are
formed. Graft polymers are produced with analogous treatment of a
solution of a polymer in a monomer. The synthesis of graft copolymers
of polyvinyl chloride and methyl methacrylate and also of block copolymers
of polyvinyl chloride and ethyl cellulose is described. [Abstracter]
Card 1/2

The possibility of producing block ...

S/081/62/000/012/062/063
B158/B101

note: Complete translation.]

Card 2/2

RUSSIAN, V.Ya., inzh.

Soap phases and the continuous Mazzoni production line for
toilet soap (from "Seifen-Öl-Fette-Wachse," no. 8/2, 1955).
Kul.-zhir. prom. 27 no. 2:45 '61. (IRA 14:2)
(Soap)

RUBINSHTEYN, V.Ya.; ANANICH, L.V.

Incipient interstitial extrauterine pregnancy. Akush. i gin.
39 no.5:148-149 S-0 '63. (MIRA 17:8)

1. Iz ginekologicheskogo otdeleniya Glubokskoy mezhrayonnoy
bol'nitsy (glavnyy vrach G.Ya. Tsemakhov).

A III - 25

B.A.

Biological properties of *Fusarium* cultures (*Sporotrichum* section). Decomposition of fat. Y. I. Rubinstein (*Microbiologia*, 1950, no. 430-445).—Investigation was made of 68 strains of *Fusarium* cultures (*Sporotrichella* and *Rosarium* sections) as regards ability to break down fat and to produce from grains, substances toxic to rabbits and other animals. Only strains which break down fats are toxic and all these belonged to the *Sporotrichella* section.
D. H. SMYTH.

BOGDANOV, K.D.; DELIBASH, B.A.; VENETSIANOV, Ye.A.; GUREYEV, V.A.;
ZHIVOV, M.S.; ZEVAKIN, A.I.; NAYFEL'D, M.R.; NEYMAN, Kh.G.;
KUZNETSOV, M.P.; RIZOVATOV, A.V.; RUBINSHTEYN, Ya.A.;
TRIFONOV, A.N.; TRUNKOVSKIY, L.Ye.; KHRONCHENKO, G.Ye.

[Organization and performance of electrical equipment installation operations] Organizatsiia i proizvodstvo elektromontazhnykh rabot. Moskva, Stroiizdat, 1964. 602 p.

(MIRA 18:3)

RUBINSHTEYN, Ya. M. VTI

"Selection of a Drive for the Feed Pumps in Power Stations with Initial Pressures of 300 atm."

The Commission for High-parameter Steam of the Energeticheskiy institut (Power Institute) imeni G. M. Krzhizhanovskogo AN SSSR held a conference on May 16, 1958 devoted to new types of equipment for block-assembled power stations, operating at super-critical steam parameters. This paper was read at this conference.

Izv. Akad Nauk SSSR, Otdel Tekh nauk, 1958, No. 7, p. 152

RODINSKIY, YA, M.
SOKOLOV, Ye.Ya., doktor tekhn. nauk; RODINSKIY, Ye.M., doktor tekhn. nauk;
ZINGER, N.M., kand. tekhn. nauk; BUNIN, V.S., inzh.; ANDREYEVA, K.S., inzh.

Selection of a large-capacity turbine for district heating. Teplo-
energetika 5 no.4:3-11 Ap '58. (MIRA 11:5)

1. Vsesoyuznyy teplotekhnicheskiy institut.
(Steam turbines) (Heating from central stations)

L 22147-66

ACC NR: AP6012951

SOURCE CODE: UR/0096/65/000/011/0012/0020

AUTHOR: Rubinshteyn, Ya. M. (Doctor of technical sciences); Sokolov, Ye. Ya. (Doctor of technical sciences); Komarov, N. F. (Engineer); Bunin, V. S. (Engineer); Ruzankov, V. N. (Engineer) 328

ORG: All-Union Heat Engineering Institute (Vsesoyuznyy teplotekhnicheskiy institut)

TITLE: Thermic characteristics of heating turbine model T-100-130-TMZ

SOURCE: Teploenergetika, no. 11, 1965, 12-20

TOPIC TAGS: thermoelectric power plant, power generating station

ABSTRACT: The first model of the T-100-130 heating and power turbine was put in operation at heat and electric power station T&Ts-20 at Moscow in 1963. The turbine is designed to supply nominal loads of 100 Mw electric power and 186 Mw (160 Gcal/hr) heat energy. The turbine has a number of new features: a two-stage heating system for water supply; an increased range of pressure of heating steam, from 0.6 to 2.5 at. in the upper, from 0.5 to 2.0 at. in the lower takeoff point; heat outlets for heating water in the turbine condensers. The turbine can operate in one condensation and three heating regimes, depending on the time of year. Graphs presented in this article show the thermic characteristics produced in tests with the unit operating in all four regimes. The tests showed the unit to be reliable and efficient, more efficient than the factory guarantee by about 5%. The turbine is capable of turning out 109

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UDC: 621.165.6.001.5

L 22147-66

ACC NR: AP6012951

Mw in the condensation and 120 Mw in the heating regimes, although the generators being used with it are capable of only 100 Mw. Detailed recommendations for improving the operational characteristics of the equipment and increasing reliability are published in Elektricheskiye Stantsii, no. 1, 1965 (article by Komarov, Pechenkin, Bunin, and Ruzankov). Orig. art. has: 10 figures and 2 tables. JPRS

SUB CODE: 10 / SUBM DATE: none / ORIG REF: 003

Card 2/2 dlo

SOV/96-58-5-25/27
AUTHOR: Rubinshteyn, Ya.M., Doctor of Technical Sciences
TITLE: On the Procedure for Comparing the Efficiency of Steam and Electric Drive for Power Station Auxiliaries (O metodike sravneniya ekonomichnosti parovogo i elektricheskogo privoda mekhanizmov sobstvennykh nuzhd)
PERIODICAL: Teploenergetika, 1958, Nr 5, pp 91 - 92 (USSR).
ABSTRACT: This is a discussion of the article by Z.F. Nemtsev, published in Teploenergetika, 1957, Nr 9, in which a strong plea was made for the use of steam instead of electric drive for such equipment as feed-pumps. Nemtsev proposed that the electric power consumption of feed-pumps should be related to the fuel consumption of the least efficient station on the system and not to that of the station in which the equipment is installed. The weaknesses of the proposition are explained. It is more correct to use the mean specific fuel consumption of the system, although in some cases the fuel consumption of the actual station can be used.

Card 1/2

SOV/96-58-5-25/27

On the Procedure for Comparing the Efficiency of Steam and Electric
Drive for Power Station Auxiliaries

Considerations are also different in newly-constructed stations. When all is said and done, in many cases, steam drive of feed-pumps is preferable and sometimes the only possible solution, but Nemtsev's method of explaining this is not altogether acceptable.

1. Power plants--Equipment 2. Power drivers--Effectiveness 3. Heat engines
--Performance 4. Electric motors--Performance

Card 2/2

RUBINSHTEYN, Ya. M., doktor tekhn. nauk; GRIBKOV, M.N., inzh.; KOMAROV,
N.F., inzh.; YEDIGAREV, L.V., inzh.

Results of tests on the modernized SVK-150 turbine at the
Leningrad Metalworking Plant. Teploenergetika 5 no. 5:3-9 My '58.
(Steam turbines)

AUTHOR: Rubinshteyn, Ya.M.; Dr.Tech.Sci. & Trubilov, M.A. SOV/96-58-7-15/22
Cand.Tech.Sci.

TITLE: A steam jet method of measuring clearances in steam turbines.
(Parostruyyny metod izmereniya zazorov v parovykh turbinakh)

PERIODICAL: Teploenergetika, 1958, No.7, pp. 68-74 (USSR)

ABSTRACT: Gaps and clearances between turbine rotors and stators are often made larger than they really need be because the consequences of interference are very serious. To study the possibility of reducing these clearances, the All Union Thermo-technical Institute developed, in 1955, a special procedure for measuring axial and radial gaps directly under all conditions of operation, including starting. In this method cylindrical nozzles of 8 - 10 mm diameter are inserted into the turbine casing at places where it is desired to follow the changes in clearance, as shown in Fig.1: a small gap is left between the end of the nozzle and the rotor. For purposes of measurement a supply of superheated steam is delivered to the nozzle at a pressure sufficient to ensure critical flow through the annular gap between the end of the nozzle and the rotor. A formula is given for the critical flow of steam through this gap, and if the steam flow is measured with an appropriate diaphragm and differential manometer, as shown in Fig.2. numerical values can be inserted into the formula for the flow and an expression for the gap length can

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A steam jet method of measuring clearances in steam turbines. SOV/96-58-7-15/22

be derived. The formula can be simplified if heat losses in the tube between the diaphragm and the nozzle are neglected. The formula can be still further simplified if the pressure at the diaphragm is maintained constant during the tests. The final simple relationship is plotted graphically in Fig.2., from which it will be seen that the proposed method is sensitive. For instance, if the gap changes from 1.0 to 1.1 mm, the pressure drop on the differential manometer changes from 100 mm Hg to 121 mm Hg. It is sometimes more convenient to extract steam from the nozzle than to deliver it to the nozzle; in this case too the steam flow is a function of the gap length. This method of measuring clearances was tested on a rig with the rotor both at rest and moving, using compressed air and moving the nozzle. Direct flow of air to the nozzle was studied, also reverse flow, or extraction from the nozzle. The results are given in Fig.3. It will be seen that rotation of the rotor made no difference to the results. It will also be seen that the critical pressure ratio for a square-edged nozzle was 0.2 for direct and 0.5 for reverse flow. Data on flow are given in Figs. 4. & 5., which show that when the gap is varied from 0 to 0.1 times the nozzle diameter, the flow-factor is practically constant. However, as the gap is increased from 0.1 to 0.25 times the nozzle diameter, the flow-factor is much reduced, which makes determinations more difficult. Moreover, super-critical flow cannot always be maintained, and then

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an additional correction is necessary. The procedure for making this correction is explained. It is shown that in order to determine the gap length it suffices to measure the steam pressure at the diaphragm, the pressures before and after the nozzle, and the pressure-drop across the diaphragm. Nomograms for determination of gaps with direct and reverse flows are given in Figs.6. & 7. The data for flow-factors and the corrections for deviation from critical conditions given in Figs. 3, 4. and 5., are obtained from tests in which full account was not taken of such factors as the shape of the nozzles and their edges or the surface roughness. However, the data can be used to measure gaps with sufficient accuracy for practical purposes. This is evident from the data given in Fig.8., obtained during tests of the influence of axial clearances on efficiency obtained during tests on an English Electric turbine type AT-25. The rotor of this turbine could be displaced axially during operation by means of a special hand-drive. Rotor displacement was measured by the steam-jet apparatus and also by a mechanical indicator and it will be seen that agreement is good, for example 0.5 mm by mechanical method and 0.48 mm by jet. If better accuracy is required, the nozzles must be specially calibrated, especially for large gaps. Procedure can be simplified if the pressure in the turbine chamber in which the gaps are located is always above atmospheric, as in a superposed turbine.

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A steam jet method of measuring clearances in steam turbines. SOV/96-58-7-15/22

Steam can then be extracted from the nozzles to a low-pressure line. The formulae required for this case are given and it is shown that only two measurements may be made, namely, the pressure in the turbine chamber and the pressure before the measuring nozzle. The clearance may then be determined from a formula or from the nomogram given in Fig.7. A more convenience nomogram constructed for one case of measuring the actual clearance in the flow path of a turbine when the diameter of the impulse nozzle is 10 mm, and of the measuring nozzle 15 mm, is given in Fig.9. To reveal the causes of changes in radial clearances in turbines, four impulse nozzles must be installed at each section investigated, above and below and to right and left of the shaft. Changes in the centring can then be observed as well as changes due to thermal expansion. The procedure for doing this is explained and an example of measurements on the forward gland of a 6-MW Siemens-Schuckert turbine installed in the Heat and Electric Power Station of the All-Union Thermotechnical Institute is given in Fig.10. It will be seen from the graph that as the turbine speeds up the rotor is displaced to the right and upwards. As the turbine is heated up the rotor first continues to be displaced upwards and then gradually falls and under steady conditions it is 0.15 mm below the initial position. The reasons for this movement are explained. A graph of this kind can be used to make a rational selection of the clearances in the forward gland of a turbine of this kind. A

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schematic diagram of the arrangements for measuring radial and axial clearances used in 1956-57 on turbines type VK-100-2 of the Leningrad Metal Works, type AK-50 of the Khar'kov Turbo-Generator Works, and on types VK-50 of the AEG firm, and others, is illustrated in Fig.11. The installation of impulse nozzles of this device in the regulating stage chamber of a turbine type VK-100-2 is illustrated in Fig.12. This method has proved very practical and has made it possible to explain the main causes of changes in clearances during starting and operation of turbines. However, because of the inertia of the method it cannot be used to follow eccentricity of the shaft resulting from temperature distortion during normal running of the rotor. It is, therefore, necessary to develop improved inertialess and simpler indicating devices based on electrical inductance or capacitance. There are 12 figures.

ASSOCIATION: Vsesoyuznyy Teploekhnicheskii Institut (All-Union Thermotechnical Institute)

1. Steam turbines - Design
2. Turbine rotors - Performance
3. Steam - Applications
4. Mathematics - Applications

Card 5/5

RUBINSHTEYN, Ya.M., doktor tekhn. nauk; SOKOLOV, Ye.Ya., doktor tekhn.
nauk; KOMAROV, N.F., inzh.; BUNIN, V.S., inzh.; RUZANKOV, V.N., inzh.

Thermal characteristics of the T-100-130 central heating
turbine. Teploenergetika 12 no.11:12-20 N '65. (MIRA 18:10)

1. Vsesoyuznyy teplotekhnicheskii institut.

96-4-1/24

Ra. 5/10/24 2 7 8 101
AUTHORS: Sokolov, Ye. Ya. (Dr. Tech.Sc.), Rubinshteyn, Ya. M.
(Dr. Tech.Sc.), Zinger, M.J. (Cand. Tech.Sc.), Bunin, V.S.
(Engineer) and Andreyeva, K. S. (Engineer).

TITLE: The Selection of a High Power Turbine for District Heating Plants
(Vybor tipa teplofikatsionnoy turbiny dlya vol'shoi moshchnosti).

PERIODICAL: Teploenergetika, 1958, No. 4, pp 3-11 (USSR)

ABSTRACT: Heat-supply turbines produced for steam conditions of 90 atms and 500°C, comprise types BT-25, with controlled district-heating pass-out at a pressure of 1.2-2.5 atms, and BT-50, with two regulated steam pass-outs at pressures of 1.2-2.5 and 13±3 atms. Their performance does not satisfy modern requirements for district-heating of large towns, either in respect of unit output or pass-out steam conditions. It is important to increase the efficiency of heat and electric power stations; the prime need in these systems is to increase the amount of electric power generated. District-heating turbines should be 50 and 100 MW, with initial steam conditions of 130 atms and 565°C, as now used for condensing sets. Many investigators have shown that electrical output can be raised by adopting multi-stage heating of system-water instead of using only the pressure of 1.2 atms. If

Card 1/7

The Selection of a High Power ^{/Turbine for} District Heating Plants. 96-4-1/24

possible, the lower limit of steam pressure in the pass-out should be 0.5 atms. The pressure of the lower pass-out may be constant under all conditions, except nearly pure condensing conditions, or may be increased to 0.8-0.9 atms as suggested by B. V. Rudomino. It would be also advisable to provide for utilisation in the winter period of the ventilating flow of steam to the condenser. This steam can be used to heat make-up water in open heat-supply systems or to heat returned water in closed systems. Possible types of turbine are discussed. The present practice of having comparatively high reduction factors in urban district-heating stations gives a very high heat-loading on pass-out turbines and a very high steady electrical load throughout almost the entire heating season. Therefore, later stages of system-water heating could be supplied with steam from unregulated tapplings. When the district-heating station is located out of town, the pressure level in the outermost unregulated tapping in the water system could be limited to about 4 atms. When the station is a considerable distance from the centre of the thermal load, a pressure of the order of 14-16 atms may be advisable in the last unregulated

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The Selection of a High Power ^{/Turbine for} District Heating Plants. 96-4-1/24

tapping on the run of water. The use of reheat in heat-supply stations gives less economy than it does in ordinary condensing stations. Nevertheless, reheat is advantageous in turbines with pass-outs at 0.5, 1.5 and 4 atms; it is inadvisable for turbines with pass-out pressures greater than 0.5- 2 - 6 - 16 atms. The manufacture of two types of 50 and 100 MW heat-supply turbines is recommended. One is a turbine with initial steam conditions of 130 atms, 565°C, with reheat only on the 100 MW size; the lower limit of pass-out pressure should be 0.5 atms, with unregulated district-heating pass-outs of 1.5 and 4 atms. This turbine is denoted $\Pi BT_{0.5-4}$. The second type of turbine has the same initial steam conditions without reheat and the same lower limit of pass-out pressure of 0.5 atms but with unregulated pass-outs for district heating at 2.0, 6.0 and 16.0 atms. This turbine will be denoted $\Pi BT_{0.5-16}$.

To evaluate these two types, calculations were made of steam flows from the pass-outs and of steam flows in the turbine sections; also of live steam consumption

Card 3/7 for various ambient temperatures, temperature curves and

The Selection of a High Power District Heating Plants. ^{/Turbine for} 96-4-1/24

systems of heat supply, etc. In comparing different types of turbine it was assumed that they supplied a region of the same calculated thermal loading. Since the turbine is designed for conditions in which the flow of steam to the condenser is a minimum, the requisite turbine power will vary for different systems of heat supply and temperature gradients, and in no case does it correspond to the standard output of turbo-generator. In comparing efficiencies of different types of turbine this is unavoidable and immaterial. The standard thermal loading of the district was taken as 400 M kcal/hr, of which half is provided for by pass-out steam; a boiler house provides for the remainder and for peak loads. The turbine designs were carried out for the thermal circuits shown in Figs. 1 and 2. For both turbines the feed water was assumed to be heated to a temperature of 232°C. The steam pressures in the low-pressure regenerative tappings corresponded to those for district-heating schemes. The efficiencies of the turbines were calculated in a way very similar to that formalised by the firm of General Electric in 1952. For turbine type $\Pi BT_{0.5} - 16$, the

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The Selection of a High Power Turbine for District Heating Plants. CC-4-1/24

only case considered was that of stations outside towns, which requires that the system water be heated to 180°C . For turbine $\Pi\text{BT}_{0.5-4}$ the case considered was that of a series circuit comprising the peak boiler-house, the district-heating heaters and a station alternatively in or out of town. Temperature and water-flow graphs for the closed systems are given in Figs. 3 and 4 for both types of turbine. To compare these variants in respect of fuel consumption, the electrical outputs were equated in all cases to 135 MW. The respective fuel consumptions, obtained with identical thermal and electrical loadings, are given in Table 1, which shows that the use of turbine $\Pi\text{BT}_{0.5-4}$ instead of turbine $\Pi\text{BT}_{0.5-16}$ gives a fuel economy of about 5%. For turbine $\Pi\text{BT}_{0.5-4}$ the fuel consumption is about 1% less when the system water temperature is 150°C than when it is 180°C . The comparison also shows that for the same thermal and electrical loads turbine $\Pi\text{BT}_{0.5-4}$ has 7% less fuel consumption than turbine $\text{B}\Pi\text{T-50-3}$. A technical and economic comparison is then made between the different types of heat-supply turbine. The pros and cons of using the two kinds of turbines in an out-of-town station are discussed at some

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The Selection of a High Power District Heating Plants. /Turbine for 96-4-1/24

length. The advisability of installing one or the other depends on the amortisation time of the additional cost of the more expensive turbine, and a formula is given to determine this time. The main calculations were made for a district with a maximum thermal loading of 400 M kcal/hr, and ambient air temperatures of -36, -30 and -22°C.

Table 2 gives annual fuel economy figures for various climatic regions and various heat-supply systems resulting from the installation of a turbine type $\Pi BT_{0.5-4}$ with the given thermal and electrical loads. The table shows that this turbine saves more fuel than turbine type $\Pi BT_{0.5-16}$. Calculations are also made for the open circuit system of heat-supply. The case of an out-of-town station and a peak boiler house in the town is considered. Calculations were made of the extra initial costs of the heating system with series connection of the power station and peak boiler house as compared with parallel connection. The results are given in Table 3. Graphs of the amortisation time of the initial costs against the radius of service of the thermal circuit are given in Fig. 5 and

Card 6/7 relate to the climatic conditions of Moscow, with turbines

The Selection of a High Power Turbine for District Heating Plants. 96-4-1/24

$\Pi_{BT0.5-4}$ and $\Pi_{BT0.5-16}$. Similar figures were also found for other climatic conditions. As the ambient temperature gets lower and the number of hours of utilisation of the installed thermal capacity of the station increases, the amortisation time of the additional capital expenditure decreases slightly. Only two factors have a major influence on the choice of type of turbine; the initial outlay and the fuel consumption. The use of turbine type $\Pi_{BT0.5-4}$ instead of $\Pi_{BT0.5-16}$ gives about 5% overall fuel economy but greater capital cost. Assuming the climatic conditions of Moscow, and amortisation over five years, the field of application of turbine type $\Pi_{BT0.5-4}$ is indicated in Table 4 for several sizes of heating system. In most cases turbine $\Pi_{BT0.5-4}$ is more suitable and therefore recommended for development in outputs of 50 or 100 MW.

Card 7/7 There are 5 figures, 4 tables and 2 Russian references.

ASSOCIATION: All-Union Thermo-Technical Institute. (Vsesoyuznyy Teploekhnicheskiy Institut).

AVAILABLE: Library of Congress

RUBINSHTEYN, Ya.M., doktor tekhn.nauk

Results of the testing of PE-500-180 feeding pump units.
Teploenergetika 8 no.1:49-56 Ja '61. (MIRA 14:4)

1. Vsesoyuznyy teplotekhnicheskiy institut.
(Boilers—Equipment and supplies)
(Pumping machinery)

BERMAN, L.D., doktor tekhn.nauk; RUBINSHTEYN, Ya.M., doktor tekhn.nauk;
SHCHEGLYAYEV, A.V.

Selecting the optimum cross section dimensions of the exhaust
and the number of shafts for 300 to 600 MW steam turbines.
Teploenergetika 7 no.10:14-22 0 '60. (MIRA 14:9)

1. Vsesoyuznyy teplotekhnicheskii institut. 2. Cheln-korres-
pondent AN SSSR (for Shcheglyayev).
(Steam turbines)

BERMAN, I.D., doktor tekhn.nauk; RUBINSHTEYN, Ya.M., doktor tekhn.nauk;
SHCHEGLYAYEV, A.V.

Reply to I.V.Shapiro, A.E.Gel'tman, and D.M.Budniatskii's
article, Teploenergetika 8 no.8:73-76 Ag '61, (MIRA 14:10)
(Turbines) (Electric power plants) (Shapiro, I.V.)
(Gel'tman, A.E.) (Budniatskii, D.M.)

S/096/63/000/004/002/010
E194/E455

AUTHORS: Rubinshteyn, Ya.M., Doctor of Technical Sciences, Professor,
Borevskiy, Ye.I., Engineer

TITLE: Thermal efficiencies of turbine type K-160-130
(ПБК-150 [PVK-150]) of KhTGZ im. Kirov

PERIODICAL: Teploenergetika, no.4, 1963, 8-14

TEXT: In 1961, the All-Union Heat Engineering Institute carried out thermal tests on a prototype turbine K-160-130 (PVK-150) of KhTGZ im. Kirov installed at the Pridneprovskaya GRES. It operates as a unit with drum-type boiler ТП-90 (TP-90). Previous to the tests the turbine had been in service for about 6213 hours and certain modifications had been made to improve starting conditions. Some forty tests were carried out in four series: balancing tests to check works' guarantees on heat consumption; tests to determine the efficiency of the low-pressure cylinder; tests to obtain a "universal curve" of corrections to output for changes in condenser pressure; tests to determine regulating-stage efficiency. A block diagram of the thermal circuit is given with the location of thermocouples. Test results are presented in graphs and tables

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Thermal efficiencies ...

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and the following conclusions are drawn. The turbine meets guarantees in respect of heat consumption. At rated steam conditions (130 atm, 565/565°C) and condenser pressure 0.035 atm the turbine develops a maximum output of 164 MW with a steam consumption of 467 tons per hour. The internal relative efficiencies are as follows: high-pressure cylinder (stages 1 to 7) 78.5% (reckoned from conditions before first-stage nozzles) which is 7% (relative) below the calculated value; medium-pressure cylinder (stages 8 to 15) 91%, i.e. 3.5% (relative) above the calculated value; low-pressure cylinder (stages 16 to 21), allowing for discharge velocity losses, 81% which equals the calculated value. At rated conditions the following steam pressure-drops were observed: in the stop valve 3.5 kg/cm²; in the regulating valve 3 kg/cm²; in the reheating line 5.5 kg/cm². The turbine regenerative system is generally working well and heats the feed water to the required temperature. The drainage coolers for high-pressure steam, numbers 6 and 7, are less effective than expected but drainage cooler no.8 operates as calculated. The Card 2/3

S/096/63/000/004/002/010
E194/E455

Thermal efficiencies ...

second tapping position for feed-water heating is not well chosen.
There are 11 figures and 4 tables.

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy institut
(All-Union Heat Engineering Institute)

Card 3/3

PLINER, Yuriy L'vovich; SUCHIL'NIKOV, Sergey Ivanovich;
RUBINSHTEYN, Yevsey Abramovich; LEPINSKIKH, B.M., red.;
KOROVINA, N.A., tekhn. red.

[Aluminothermy in the production of ferroalloys and ad-
dition alloys] Aluminotermicheskoe proizvodstvo ferro-
splavov i ligatur. Moskva, Metallurgizdat, 1963. 174 p.
(MIRA 16:10)

(Iron alloys—Metallurgy) (Aluminothermy)

L 43088-66 EWT(m)/EWP(t)/ETI . IJP(c) JD/JG

ACC NR: AR6014366 (A,N)

SOURCE CODE: UR/0137/65/000/011/G029/G029

AUTHORS: Pliner, Yu. L.; Arkhipov, O. A.; Rubinshteyn, Ye. A.

32
B

TITLE: Manufacture of carbon-free vanadium alloys

SOURCE: Ref. zh. Metallurgiya, Abs. 11G214

REF SOURCE: Sb. tr. Klyuchevsk. z-da ferrosplavov, vyp. 1, 1965, 81--88

TOPIC TAGS: vanadium containing alloy, metal melting, iron containing alloy, aluminum containing alloy

ABSTRACT: It is reported that the most rational method for obtaining carbon-free V alloys is the aluminothermic method (0.02--0.06% C). The dependence of V extraction on the amount of reducing agent and other parameters was investigated. The Al content of the alloy should be kept below 1.5--2.0%. The smelting parameters of V alloys depend on the correct choice and amount of fluxes in the charge. The effect of lime in the slag was studied. The temperature dependence of the slag viscosity from Fe-V melts and the dependence of V extraction and Al content in the alloy were studied as a function of V_2O_5 particle size.

Card 1/2

UDC: 669.292.018.9

L 43088-66

ACC NR: AR6014366

Recommendations for further decreasing the impurities content in the alloy are presented. Bibliography of 8 citations. V. Semakin [Translation of abstract]

SUB CODE: 11

Card 2/2 *gl*

RUBINSHTEYN, Yakov Yevseyevich

[Essays on the development of Soviet credit] Ocherki razvitiia
sovetskogo kredita. Moskva, Gosfinizdat, 1958. 254 p. (MIRA 13:3)

(Credit)

SOV/3-59-4-17/42

32(1)

AUTHOR:

Rubinshteyn, Ya.Ye., Candidate of Economic Sciences, Docent

TITLE:

We Continue Discussion on Methods Applied in a Seminar

PERIODICAL:

Vestnik vysshey shkoly, 1959, Nr 4, pp 46-50 (USSR)

ABSTRACT:

Seminar exercises are an important link in the teaching process, and it is only the methods sometimes applied which call forth objections. This is the case when the following factors are disregarded: the composition of the audience, the peculiarity of the subject and of the studied theme, the local conditions, the available time, the distinctive outline of the vuz, its connection to industry, etc. Docent A.I. Kashchenko of the Yaroslavskiy pedagogicheskiy institut (Yaroslavl' Pedagogical Institute) considers that most of the present-day seminars in political economy resemble school lessons [Ref 1], which is due to the shortcomings just indicated. The author points out the individual features of a seminar which reduce its value and the students' interest for them. As an example he intimates the important aspects of a seminar, referring in this connection to A.V. Netsenko and L.L. El'yashova [Ref 1].

Card 1/2

SOV/3-59-4-17/42

We Continue Discussion on Methods Applied in a Seminar

He deals with the lack of time usually experienced by both the instructor and students, recommends that the system of reports submitted by the students be applied with a certain cautiousness, and sets forth some general rules for seminars. He mentions Candidate of Economic Sciences P.S. Nikol'skiy of the Moskovskiy finansovyy institut (Moscow Finance Institute) and states that the best seminars should be published in the scientific transactions of the vuzes. There are Soviet references.

ASSOCIATION: Moskovskaya vysshaya shkola profdvizheniya VTsSPS (Moscow Higher School of Labor Union Movement VTsSPS).

Card 2/2

RUBINSHTEYN, Yakov Yevseyevich; SITNIN, V., otv. red. + LITUNOVSKAYA,
M., red. izd-va.; LEBEDEV, A., tekhn. red.

[Organization and development of Soviet credit] Ocherki organizatsii
i razvitiia sovetskogo kredita. Moskva, Gosfinizdat, 1958. 254 p.
(MIRA 11:11)

(Credit)

I. 21656-66 EWP(m)/EPF(n)-2/EWP(t) LIP(e) ID/JG
ACC NR: AR6011594 SOURCE CODE: UR/0137/65/000/012/V031/V031

AUTHOR: Knyshch, E. A.; Konev, A. F.; Rubinshteyn, Ye. A.

ORG: none

TITLE: Optimum conditions for melting ferroniobium from commercial niobium pentoxide

SOURCE: Ref. zh. Metallurgiya, Abs. 12V228

REF SOURCE: Sb. tr. Klyuchevsk. z-da ferrosplavov, vyp. 1, 1965, 69-73

TOPIC TAGS: niobium alloy, iron alloy, niobium compound, metal melting, slag, metal extraction

TRANSLATION: The authors studied the effects which the quantity of reducing agent in the charge as well as the slag and metal composition have on the technical and economic indices of aluminothermic Fe-Nb melting. It is found that maximum Nb extraction (85%) is reached when Al fed to the charge is 110% of the theoretically required amount. Lime was added to the charge in quantities up to 60% of the Nb_2O_5 to study the effect of slag composition. Maximum Nb extraction (89.2%) was reached with the addition of lime to the charge in quantities of 25-30% of the Nb_2O_5 . A further increase in lime concentration lowers the specific heat of the process and reduces the extraction of Nb. Maximum extraction of Nb into the ingot (96%) was observed with the addition of Fe ore to the charge

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UDC: 669.168.001

1 21656-66

ACC NR: AR6011594

in quantities of 20-30% of the Nb_2O_5 . The resultant data are used for working out technical conditions for production of low-silicon Fe-Nb from commercial Nb_2O_5 . D. Kashayeva. [JPRS]

SUB CODE: 11, 13 / SUBM DATE: none

Cord 2/2

LJC

RUBINSHTEYN, Ye.N.; ARDANOVA, N.P., tekhn. red.

[Catalog, 1957-1961] Katalog 1957-1961. Moskva, 1962. 146 p.
(MIRA 16:8)

1. Gosudarstvennoye izdatel'stvo geograficheskoy literatury.
Moscow.

(Catalogs, Publishers')

RUBINSHTEYN, Ye.S.

Winters with a temperature minimum ("warm core") and winters with evenly distributed temperature ("coreless"). Izv. AN SSSR. Ser. geog. no.4:16-27 J1-Ag '62. (MIRA 16:5)

1. Glavnaya geofizicheskaya observatoriya imeni A.I.Voyeykova,
(Arctic regions--Atmospheric temperature) (Winter)

3(3)

PHASE I BOOK EXPLOITATION

SOV/2771

Rubinshteyn, Yevgeniya Samoilovna

K probleme izmeneniya klimata; nalichiye i kharakter izmeneniya klimata
(Climatic Changes; Existence and Nature of Climatic Changes) Leningrad,
Gidrometeoizdat, 1946. 83 p. (Series: Trudy nauchno-issledovatel'skikh
uchrezhdenii. Ser. 1, Meteorologiya, vyp. 22) PHOTOCOPY. Errata slip
inserted. 500 copies printed.

Sponsoring Agencies: USSR. M. Ministerov Glavnoye upravleniye gidrometeo-
rologicheskoy sluzhby, and Glavnaya geofizicheskaya observatoriya.

Ed.: M. M. Yasnogorodskaya; Tech. Ed.: L. B. Kononova.

PURPOSE: This book is intended for meteorologists, climatologists, and earth
scientists in general.

COVERAGE: This book discusses the question of long-term climatic changes,
specifically the gradual warming-up of the northwestern part of European USSR.

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Climatic Changes (Cont.)

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The author analyses temperature changes in this area for a period of the recent past in which sufficient meteorological records are available, i.e., 1800 to 1940. To avoid misleading short-period fluctuations the author uses a system of mean ten-year averages. Using earlier records he finds that the average temperatures in Leningrad averaged below 3° for the period 1805-1809, above 4° from 1894 through 1927, and above 5° from 1928 on. In Upernivik, Greenland, the mean annual temperature for 1926-1936 never went below minus 7°; in earlier decades, however, it reached a minus 11°. The author concentrates on two successively running decades, 1919-1928 and 1929-1938. Results showed that the warming-up trend was not everywhere uniform, but varied with geographic location. Data are presented from numerous stations throughout the world. Atmospheric processes and atmospheric circulation shifts are discussed insofar as they affect climate. No personalities are mentioned. No references are given.

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Climatic Changes (Cont.)

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4. Analysis of data on warming-up for 1919-1928 and 1929-1938 periods 44
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AVAILABLE: Library of Congress (QC982.5.R8)

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MM/fal
1-5-59

3 (7)

AUTHOR:

Smirnov, A. G.

SOV/50-59-9-16/16

TITLE:

At the Hydrometeorological Service Administration of
Estonskaya SSR

PERIODICAL:

Meteorologiya i gidrologiya, 1959, Nr 9, pp 58 - 59 (USSR)

ABSTRACT:

On May 12-13, 1959, a conference on the problem of organizing the Gidrometeofond (Hydrometeorological Fund) and on the state of hydrometeorological investigation of the area of Estonskaya SSR, and the water area of the sea, took place at the Upravleniye gidrometeoslužby Estonskoy SSR (Hydrometeorological Service Administration of Estonskaya SSR). Collaborators of the UGMS (Hydrometeorological Service Administration), representatives of production-, planning- and scientific institutions, as well as of the Estonian universities and the Glavnaya geofizicheskaya observatoriya im. A. I. Voyeykova (Geophysical Main Observatory imeni A. I. Voyeykov) were taking part. The following reports were delivered: A. G. Smirnov, Head of the UGMS of the Estonskaya SSR, "On the Activity and Tasks of the Gidrometeofond UGMS Estonskoy SSR (Hydrometeorological Fund of the Hydrometeorological Service Administration of Estonskaya SSR)"; E. P. Maanvere, Director of the

Card 1/3

At the Hydrometeorological Service Administration of the Estonskaya SSR SOV/50-59-9-16/16

Tallinskaya gidrometeorologicheskaya observatoriya (Tallin Hydrometeorological Observatory), "On the State of Hydrometeorological Investigation of the Area of the Estonskaya SSR and the Adjoining Sea"; Professor Ye. S. Rubinshteyn (Geophysical Main Observatory), "Principal Tasks of Climatology in Connection With the Development of National Economy of the USSR in 1959-1965".-- Short reports on the state of scientific research work concerning hydrometeorological subjects at the institutions represented by the lecturers were given by the representatives: of the Tartusskiy gosudarstvennyy universitet (TGU) (Tartu State University); of the Institut fiziki i astronomii (IFA) (Institute of Physics and Astronomy); of the Institut stroitel'stva i stroymaterialov (ISiSM) (Institute of Building and Building Materials) of the AN Est.SSR (Academy of Sciences of the Estonskaya SSR); of the Estonskiy nauchno-issledovatel'skiy institut zemledeliya i melioratsii (ENIIZIM) MSKh Est. SSR (Estonia Scientific Research Institute of Agriculture and Melioration of the Ministry of Agriculture of the Estonskaya SSR); and of the Tallinskiy politekhnicheskii institut (TPI)

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(Tallin Polytechnic Institute). The representatives of the Estonoproyekt, of the Upravleniye rybnoy promyshlennosti Estonskogo sovnarkhoza (Administration of the Fishing Industry of the Estonia sovnarkhoz) objected to the insufficient publication of available data of hydrometeorological observations, and the unsatisfactory standard of scientific research work on hydrometeorology in the Republic. The representatives of the ENIIIZIM and of the Estonoproyekt mentioned the great difficulties in projecting work due to the small number of observations of ground freezing, the insufficient network of hydro-metrical posts in the marshland, and the absence of discharge characteristics worked out for several years for the area of the Republic. The Conference recommended the speeding-up of measures for establishing the Gidrometeofond, the intensification of the study of hydrometeorological conditions in the Republic and the adjoining sea, and a better coordination of the work of the different organizations.

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of foreign countries. Geog. v shkole 21 no. 4:54-56 J1-Ag '58.
(MIRA 11:7)

(Geography, Economic--Study and teaching)

PERLIN, S.I.; RUBINSHTEYN, Ye.

One hundredth anniversary of V.V.Dokuchaev's birth. Geog. v shkole
no.3:73-74 My-Je '47. (MLRA 9:6)
(Dokuchaev, Vasilii Vasil'evich, 1846-1903)

IGNATENKO, G.F., inzh.; PLINER, Yu.L., inzh.; LAPPO, S.I., inzh.; RUBINSHTEYN, Ye.A., inzh.; KHYSHEV, E.A., inzh.

Technology of making high-nitrogen, carbon-free, ferrochromium by the aluminothermic method. Stal' 20 no.9:817-818 S '60.

(MIRA 13:9)

1. Klyuchevskiy zavod ferrosplavov.

(Iron-chromium alloys--Metallurgy)

(Aluminothermy)

GENKIND, G.Ya.; DZHULAY, P.S.; RUBINSHEYN, Ye.I.; ANDRONOV, V.K.,
inzh., obshchiy red.; ZHURAVLEV, B.A., red.izd-va; BACHURINA,
A.M., tekhn.red.

[Catalog of parts of the TDT-40 timber skidding tractor]
Katalog detalei trelevochnogo traktora TDT-40. Sost.G.IA.
Genkind i dr. Moskva, Goslesbumizdat, 1958. 148 p.

(MIRA 12:7)

(Tractors--Catalogs)

(Lumbering--Machinery)

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Length of record in climatology. Trudy GGO no.181:46-55 '65.

(MIRA 18:10)

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"The Difference ~~in Mean~~ Monthly Temperatures of Various Stations as a
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COUNTRY : USSR
CATEGORY : Cultivated Plants. General Problems. M
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AUTHOR : Rubinstein, M.
INST. :
TITLE : On the System of Agriculture in Kokchetanskaya Oblast'.
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Atlas, Leningrad 1932.

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"Spring movement of the 0° Isotherm," Climate of the USSR Part I Air
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"Autumn Movement (Variation) of the 15° Isotherm," Climate of the USSR Part I
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Moscow

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S/133/60/000/009/005/015

A054/A029

AUTHORS: Ignatenko, G.F., Pliner, Yu.L., Lappo, S.I., Rubinshteyn, Ye.A.,
Knyshch, E.A., Engineers

TITLE: The Technology for Producing Carbon-Free Ferrochrome of High Nitrogen
Content by the Aluminothermic Process

PERIODICAL: Stal', 1960, No. 9, pp. 817-818

TEXT: In the aluminothermic process for producing ferrochrome of high nitrogen content, which was developed by A.M. Samarin and S.I. Filippov, in 1945-46, the charge contains chrome ore concentrate, aluminum powder, sodium nitrate and slag obtained while melting chromium metal. In connection with the ever increasing number of steel types alloyed with nitrogen, it was found expedient to develop a more economical method for producing this kind of steel and to improve its properties as well as to raise the nitrogen content in the nitrified ferrochrome outside of the furnace. The main factors affecting the assimilation of nitrogen by ferrochrome in the aluminothermic process were investigated at the Klyuchevsk Plant. The nitrogen content of ferrochrome depends in the first place on the amount of nitrogen separated during melting, i.e., on the amount of saltpeter added to the charge. Melting tests were carried out with a saltpeter con-
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The Technology for Producing Carbon-Free Ferrochrome of High Nitrogen Content by the Aluminothermic Process

tent of 20-65 % of the weight of chromium concentrate and grinding and sieving the materials contained in the charge to a size of 0.8 mm. The necessary specific heat of the process ($\delta H = 670$ cal/kg of the charge) was maintained by controlling the slag content. Maximum nitrogen content could be obtained by adding 40-45 % saltpeter based on the chrome concentrate. In order to determine the optimum granular size for obtaining a maximum nitrogen content in the alloy, tests were made with a constant 45 %-saltpeter content and by changing the granular size of the charge materials to a maximum of 2 mm, which, however, resulted in a decrease in the nitrogen content by 0.3 % on an average while the metal yield decreased by more than 20 %. The amount of deoxidizing agents affects the metal yield and the melting process. Tests carried out with 45 % saltpeter in the charge for the purpose of determining the optimum quantity of deoxidizing agents revealed that the maximum nitrogen content in the alloy is obtainable by applying deoxidizers in the amount of up to 97 % of the theoretical quantity of deoxidizers required for the process. In order to establish the optimum heat conditions tests were carried out with 670-750 cal/kg of the charge and it was found

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that an increase in the specific heat of the process decreases the nitrogen content, while the maximum was obtained at a heat condition ensuring a specific heat of 670 cal/kg of the charge. Based on the test results a technology was developed for producing high-nitrogen, carbon-free ferrochrome, according to which 1.5-1.7 % nitrogen content can be obtained with 25 % saltpeter in the charge and with a specific heat of 625-635 cal/kg, whereas 2.0-2.1 % nitrogen content will be ensured with 45 % saltpeter in the charge and with a δ H value of 670 cal/kg. There are 1 figure, 1 set of figures and 2 Soviet references.

ASSOCIATION: Klyuchevskiy zavod ferrosplavov (Klyuchevsk Ferro-Alloy Plant)

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RUBINSHTEYN, Ye.S.; YASNOGORODSKAYA, M.M., red.; KONONOVA, L.B., tekhnred.

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Sep/Oct 1947

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"Iz Ak Nauk SSSR, Ser Geog i Geofiz" Vol XI, No 5

A short history of the development of Soviet
climatological work for the past thirty years.
Special emphasis is placed on the work done by the
Central Geophysical Observatory. This article
mentions several others which have been written on
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Jul/Aug 48

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"Against Oversimplification and Dilettantism,"
Ye. S. Rubinshteyn, I. A. Gol'tsberg, F. F.
Davlatyay, O. A. Drozdov

"Meteorol i Gidrol" No 4, pp 100-103

Severe criticism of distribution maps of mean
monthly air temperatures in Jan and Jun at
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lack of information shown by a doctor who heads
Chair of Meteorol, Timiryazev Agr Acad. Submitted
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